

Listing of the Claims

1. (Currently Amended) A detector arrangement with a plurality of detector elements or image pixels, which each have an integrated SD modulator ~~(20 to 29)~~, wherein the SD modulator ~~(20 to 29)~~ has a differential design and/or a plurality of stages.
2. (Currently Amended) A detector arrangement as claimed in claim 1, wherein the SD modulator ~~(20 to 29)~~ is extended with a decimation filter ~~(30)~~ to a SD-A/D converter.
3. (Currently Amended) A detector arrangement as claimed in claim 1, wherein the detector elements or image pixels as well as the SD modulators ~~(20 to 29)~~ are realized on a CMOS- semiconductor structure.
4. (Currently Amended) A detector arrangement as claimed in claim 1, wherein the SD modulator ~~(20 to 29)~~ has a current feedback ~~(20)~~ on the signal of the detector element with an SC current source.
5. (Currently Amended) A detector arrangement as claimed in claim 1, wherein a cascaded arrangement of SD modulators ~~(20 to 29)~~ in at least one detector element or image pixel is provided ~~(29)~~.
6. (Currently Amended) A detector arrangement as claimed in claim 1, wherein the SD modulator ~~(20 to 29)~~ has an Auto- Zero- Comparator ~~(29)~~.
7. (Original) A semiconductor-based image sensor with a detector arrangement as claimed in claim 1.
8. (Original) An X-ray detector with a detector arrangement as claimed in claim 1.
9. (Original) An X-ray apparatus, particularly for computer tomography, with a detector arrangement as claimed in claim 1.